

Porting to Columbia: With OpenMP

Category: Porting to Columbia

DRAFT

This article is being reviewed for completeness and technical accuracy.

Building Applications

To build an OpenMP application, you need to use the `-openmp` Intel compiler flag:

```
%ifort -o your_executable -openmp program.f
```

Note that if you are compiling separate files, then `-openmp` is required at the link step to link in the OpenMP library.

Running Applications

Note that `OMP_NUM_THREADS` is set to 1 by default for PBS jobs. Reset it to the number of threads that you want.

Here is a sample PBS script for running OpenMP applications on Columbia:

```
#PBS -lncpus=8,walltime=1:00:00

setenv OMP_NUM_THREADS 8

cd $PBS_O_WORKDIR

./your_executable
```

Article ID: 108

Last updated: 24 May, 2011

Computing at NAS -> Porting & Developing Applications -> Porting to Columbia -> Porting to Columbia: With OpenMP

<http://www.nas.nasa.gov/hecc/support/kb/entry/108/?ajax=1>